MEMO

TO: Regional Comprehensive Plan Task Force

FROM: Jacob Lieb, Acting Lead Regional Planner, 213-236-1921, lieb@scag.ca.gov

Brett Sears, AICP, Associate Regional Planner, 213-236-1810, sears@scag.ca.gov

DATE: December 15, 2004

SUBJECT: Energy Demand Forecasting

SUMMARY:

The Task Force at its November 22, 2004 meeting, requested that staff research the possibility of conducting long range energy demand forecasting in light of the preparation of the Energy chapter of the Regional Comprehensive Plan. SCAG forecasts transportation energy demand as part of the development of the Regional Transportation Plan. SCAG does not have the capability to forecast commercial and residential energy demand beyond the California Energy Commission's current forecasting year (currently 2013).

BACKGROUND:

SCAG staff presented the draft Energy chapter outline of the Regional Comprehensive Plan at the November 22, 2004, Task Force meeting. Task Force members directed staff to research the possibility of conducting long-term energy demand forecasts.

In the 2004 Regional Transportation Plan, SCAG forecasts transportation energy consumption to 2030 using different transportation and air quality models. These models factor in the use of hybrid vehicles and alternative fuel vehicles.

SCAG has attempted to develop a methodology to forecast energy demand for single family and multifamily housing units. Staff worked with Southern California Edison to determine the average household energy usage in the SCAG region by four different climate zones. Staff then used Geographic Information Systems (GIS) to determine how many single and multiple family households would be in each of the four climate zones in 2030. SCAG computed the energy demand for residential purposes for 2030. Households use 29% of the total energy consumed in California. Knowing this, staff used its household energy demand forecast and extrapolated commercial/industrial energy demand for the region for 2030.

The California Energy Commission only projects energy demand to the year 2013. Unfortunately, SCAG's household and commercial/industrial forecasts for 2030 were not in line with the projections that the State has produced for 2013. Staff could not reason that energy demand would move from the State's forecast for 2013 to the SCAG region's forecast for 2030. Because of this, SCAG has not used the household or commercial/industrial energy analysis described in this memo.

